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BARNES & THORNBURG LLP btlaw.com

11 South Meridian Street Indianapolis, Indiana 46204-3535 (317) 236-1313

Fax Number: (317) 231-7433

FAX COVER SHEET			
TO:	NAME Examiner Hong Sang	COMPANY NAME USPTO	FACSIMILE NO. 1-571-273-8145
FROM: DIRECT	Eric E. Williams Γ DIAL: 317-231-6410 June 28, 2010	E-MAIL: eric.willi	ams@btlaw.com
-	·	NG THIS COVER SHEET):	<u>8</u>
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Dear Examiner Sang:			
Monday,	ted herewith is a revised cl June 28, 2010. We look l amendments.	aim set with proposed amend forward to hearing from you	dments per our teleconference on a later this week regarding these
Response	e once received: Please d	eliver immediately.	
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CLAIM LIST

U.S. Patent Application Serial No. 10/801,517

Our File: 51284-212664

1. (currently amended) A composition comprising

a phospholipid, wherein the phospholipid is dioleoylphosphatidylserine (DOPS),

an isolated saposin C-related polypeptide, wherein the polypeptide is selected from the group consisting of: (a) a polypeptide having [[an]] the amino acid sequence at least 95 percent identical to the entire length of SEQ ID NO: 2; and (b) a polypeptide having [[an]] the amino acid sequence identical to SEQ ID NO: 2; and

a pharmaceutically acceptable carrier;

wherein the polypeptide retains plasma membrane affinity;

wherein the phospholipid forms a nanovesicle incorporating the polypeptide; and wherein the nanovesicle incorporating the polypeptide exhibits anti-tumor activity.

- (canceled)
- (canceled)
- 4. (previously presented) The composition of claim 1, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:50.
- 5. (previously presented) The composition of claim 1, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:10.
- 6. (currently amended) The composition of claim 1 wherein the composition is capable of inducing apoptosis in hyper-proliferating cells, wherein the hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.
- 7. (previously presented) The composition of claim 1, wherein the polypeptide comprises at least 25 contiguous amino acids of SEQ ID NO: 2.
- 8. (previously presented) The composition of claim 1, wherein the mass ratio of the polypeptide to the phospholipid is in the range from about 15:1 to about 3:10.
- 9. (withdrawn; currently amended) A method for modulating the distribution of an inner leaflet component in a plasma membrane of a hyper-proliferating cell of a subject comprising administering to the subject a therapeutically effective amount of the composition of claim 1;

wherein the inner leaflet component is phosphatidylserine; and

wherein the hyper-proliferating cell is selected from the group consisting of a tumor cell and a cancer cell.

- 10. (canceled)
- 11. (withdrawn; previously presented) The method of claim 9, wherein the phosphatidylserine is dioleoylphosphatidylserine.
- 12. (withdrawn; previously presented) The method of claim 9, wherein the distribution of the inner leaflet component in the outer leaflet of the plasma membrane is altered.
- 13. (withdrawn; previously presented) The method of claim 9, wherein the concentration of the inner leaflet component in the outer leaflet is increased.
 - 14. (canceled)
 - 15. (canceled)
- 16. (withdrawn; previously presented) The method of claim 9, wherein the method promotes cell death of the hyper-proliferating cell.
- 17. (withdrawn; previously presented) A method of modulating tumor volume in a subject, the method comprising administering a therapeutically effective amount of the composition of claim 1.
- 18. (withdrawn; currently amended) The method of claim 17, wherein the composition promotes cell death in hyper-proliferating cells, wherein the hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.
 - 19. (canceled)
- 20. (withdrawn; previously presented) The method of claim 18, wherein the cancer cells are selected from the group consisting of sarcoma, neuroblastoma, breast carcinoma, and squamous cell carcinoma cells.
 - 21. (canceled)
 - 22. (canceled)
- 23. (withdrawn; previously presented) The method of claim 17, wherein the subject is a mammal.
 - 24. (withdrawn; previously presented) The method of claim 23, wherein the

mammal is a human.

- 25. (withdrawn; previously presented) The method of claim 17, wherein the tumor volume decreases.
- 26. (withdrawn; previously presented) The method of claim 17, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:50.
- 27. (withdrawn; previously presented) The method of claim 26, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:10.
 - 28. (canceled)
- 29. (withdrawn; previously presented) A method of treating a cancer in a subject, the method comprising administering a therapeutically effective amount of the composition of claim 1.
 - 30. (canceled)
 - 31. (canceled)
- 32. (withdrawn; previously presented) The method of claim 29, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:50.
- 33. (withdrawn; previously presented) The method of claim 32, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:10.
 - 34. (canceled)
- 35. (withdrawn; currently amended) The method of claim 29, wherein the composition promotes cell death in hyper-proliferating cells, wherein the hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.
- 36. (withdrawn; previously presented) The method of claim 35, wherein the cell death occurs through apoptosis.
 - (canceled)
- 38. (withdrawn; previously presented) The method of claim 35, wherein the cancer cells are selected from the group consisting of sarcoma, neuroblastoma, breast carcinoma, and squamous cell carcinoma cells.
- 39. (withdrawn; previously presented) The method of claim 29, wherein the subject is a mammal.

- 40. (withdrawn; previously presented) The method of claim 39, wherein the mammal is a human.
- 41. (withdrawn; previously presented) The method of claim 29, wherein the composition is administered enterally, parenterally, subcutaneously, intravenously, intraperitoneally, or topically.
- 42. (withdrawn; previously presented) The method of claim 29, wherein multiple doses of the composition are administered to the subject.
- 43. (withdrawn; previously presented) The method of claim 29, wherein a single dose of the composition is administered to the subject.
 - 44. (currently amended) An anti-tumor agent comprising a nanovesicle prepared by
- (a) preparing a composition that comprises (i) a dried inner leaflet component, wherein the inner leaflet component is a phosphoplipid, wherein the phospholipid is dioleoylphosphatidylserine (DOPS) and (ii) a dried and isolated prosaposin-related polypeptide;

wherein the polypeptide has an amino acid sequence selected from the group consisting of the amino acid sequence set forth in SEQ ID NO: 1, the amino acid sequence that is at least 95 percent identical to the entire length of SEQ ID NO: 1, the amino acid sequence set forth in SEQ ID NO: 2, and the amino acid sequence that is at least 95 percent identical to the entire length of SEQ ID NO:2 and wherein the polypeptide retains plasma-membrane affinity;

wherein the molar ratio of the polypeptide to the dioleoylphosphatidylserine in the composition is in the range from 1:1 to 1:25;

in a pharmaceutically acceptable carrier;

(b) treating the composition to form a nanovesicle;

wherein the nanovesicle formed has a diameter in the range 10 to 800 nm;

and wherein the composition is capable of inducing apoptosis in hyper-proliferating cells, wherein the hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.

- 45. (previously presented) The anti-tumor agent of claim 44, wherein the mass ratio of the polypeptide to the dioleoylphosphatidylserine is approximately 5:1.
 - 46. (previously presented) The anti-tumor agent of claim 44, wherein the mass

ratio of the polypeptide to the dioleoylphosphatidylserine is approximately 15:7.

- 47. (previously presented) The anti-tumor agent of claim 44, wherein the mass ratio of the polypeptide to the dioleoylphosphatidylserine is in the range from about 15:1 to about 3:10.
- 48. (previously presented) The anti-tumor agent of claim 44, comprising approximately 10 μ M polypeptide and approximately 30 μ M dioleoylphosphatidylserine.
- 49. (previously presented) The anti-tumor agent of claim 44, comprising approximately 10 μ M polypeptide and approximately 70 μ M dioleoylphosphatidylserine.
- 50. (currently amended) A composition consisting essentially of an anionic phospholipid nanovesicle consisting of dioleoylphosphatidylserine (DOPS) embedded with a biologically active saposin C-related polypeptide, wherein the polypeptide comprises [[an]] the amino acid sequence that has at least 95% sequence identity to the amino acid sequence of the entire length of SEQ ID NO:2; and a pharmaceutically acceptable carrier; wherein the phospholipid nanovesicle exhibits anti-tumor activity.
 - 51. (canceled)
 - 52. (canceled)
- 53. (previously presented) The composition of claim 50, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:50.
- 54. (previously presented) The composition of claim 50, wherein the molar ratio of the polypeptide to the phospholipid is in the range from about 1:1 to about 1:10.
- 55. (currently amended) The composition of claim 50 wherein the composition is capable of inducing apoptosis in hyper-proliferating cells upon contact, wherein the hyper-proliferating cells are selected from the group consisting of tumor cells and cancer cells.
 - 56. (canceled)
 - (canceled)
- 58. (withdrawn; currently amended) A process for the manufacture of a pharmaceutical agent comprising the steps of:
- (a) preparing a composition that comprises (i) an inner leaflet component, wherein the inner leaflet component is a phospholipid, wherein the phospholipid is dioleoylphosphatidylserine (DOPS) and (ii) a prosaposin-related polypeptide, wherein the

polypeptide is selected from the group consisting of: (a) a polypeptide having [[an]] the amino acid sequence at least 95 percent identical to the entire length of SEQ ID NO: 2; and (b) a polypeptide having [[an]] the amino acid sequence identical to SEQ ID NO: 2 and wherein the polypeptide retains plasma-membrane affinity;

in a pharmaceutically acceptable carrier;

- (b) treating the composition to form a nanovesicle;
 wherein the nanovesicle formed exhibits anti-tumor activity.
- 59. (currently amended) A pharmaceutical agent comprising nanovesicles prepared by
- (a) preparing a composition that comprises (i) an inner leaflet component, wherein the inner leaflet component is dioleoylphosphatidylserine (DOPS) and (ii) a prosaposin-related polypeptide;

wherein the polypeptide has an amino acid sequence selected from the group consisting of the amino acid sequence set forth in SEQ ID NO: 1, the amino acid sequence that is at least 95 percent identical to the entire length of SEQ ID NO: 1, the amino acid sequence set forth in SEQ ID NO: 2, and the amino acid sequence that is at least 95 percent identical to the entire length of SEQ ID NO:2 and wherein the polypeptide retains plasma-membrane affinity;

in a pharmaceutically acceptable carrier;

- (b) treating the composition to form a nanovesicle; wherein the nanovesicle formed exhibits anti-tumor activity.
- 60. (canceled)
- 61. (canceled)
- 62. (previously presented) The pharmaceutical agent of claim 59, wherein the molar ratio of the polypeptide to the dioleoylphosphatidylserine (DOPS) is in the range from about 1:1 to about 1:50.
- 63. (previously presented) The pharmaceutical agent of claim 59, wherein the nanovesicle has a diameter in the range 0.01 to 1 μ m.
- 64. (withdrawn; currently amended) A process for the manufacture of a pharmaceutical agent comprising the steps of:

(a) preparing a composition that comprises (i) a dried inner leaflet component, wherein the inner leaflet component is dioleoylphosphatidylserine and (ii) a dried and isolated prosaposin-related polypeptide, wherein the polypeptide is selected from the group consisting of: (a) a polypeptide having [[an]] the amino acid sequence at least 95 percent identical to the entire length of SEQ ID NO: 2; and (b) a polypeptide having [[an]] the amino acid sequence identical to SEQ ID NO: 2 and wherein the polypeptide retains plasma-membrane affinity;

wherein the molar ratio of the polypeptide to the inner leaflet component in the composition is in the range from 1:1 to 1:25;

in a pharmaceutically acceptable carrier;

(b) treating the composition to form a nanovesicle;

wherein the nanovesicle formed has a diameter in the range 10 to 800 nm and exhibits anti-tumor activity.

- 65. (currently amended) A pharmaceutical agent comprising nanovesicles prepared by
- (a) preparing a composition that comprises (i) a dried inner leaflet component, wherein the inner leaflet component is dioleoylphosphatidylserine (DOPS) and (ii) a dried and isolated prosaposin-related polypeptide;

wherein the polypeptide has an amino acid sequence selected from the group consisting of the amino acid sequence set forth in SEQ ID NO: 1, the amino acid sequence that is at least 95 percent identical to the entire length of SEQ ID NO: 1, the amino acid sequence set forth in SEQ ID NO: 2, and the amino acid sequence that is at least 95 percent identical to the entire length of SEQ ID NO:2 and wherein the polypeptide retains plasma-membrane affinity;

wherein the molar ratio of the polypeptide to the inner leaflet component in the composition is in the range from 1:1 to 1:25;

in a pharmaceutically acceptable carrier;

(b) treating the composition to form a nanovesicle;

wherein the nanovesicle formed has a diameter in the range 10 to 800 nm and exhibits anti-tumor activity.